

0.88-1.92) but not in men. The noise exposure level at work was associated with increased risk of MI in men (OR crude 1.36; 1.03-1.81, OR adjusted 1.43; 1.05-1.96).

**Conclusion:** Annoyance by environmental noise and the noise exposure level at work is associated with a moderately increased risk of MI in women and in men, respectively. Further investigation of the gender related cardiovascular risk of noise burden may elucidate the responsible mechanisms and eventually aid in improving preventive strategies of MI.

#### 1096-73

### Internist Use of a Hand Carried Ultrasound Device for the Screening of Cardiovascular Disease in the Medically Underserved

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**Background.** Underserved minority populations have high prevalence of cardiovascular disease (CVD). Screening for CVD by physical examination is limited by poor sensitivity and specificity. Reduced access to technology may play a role in delayed detection of CVD and disparities in cardiac outcomes. Although echocardiography is highly accurate in detecting CVD, problems of portability and cost of full-featured echo platforms preclude its use in underserved areas. Hand carried ultrasound (HCU) devices have the potential to overcome these difficulties. **Methods.** 153 subjects (mean age 45, range 21-85 years, 54% female, 40% African American, 58% Hispanic) were recruited from a primary care health clinic in an underserved area to undergo a brief echo examination using an HCU device (Optigo, Agilent Technologies). Imaging was performed by a general internist with 30 hours of instruction and experience performing 30 exams with the HCU device.

**Results.** There were 27 clinically significant findings in 19 subjects (12.4%). These findings included significant valvular dysfunction (n=9), regional wall motion abnormalities (n=7), and ventricular dysfunction (n=8). Abnormal findings were not predicted by patient age or cardiac risk factors. Patients who presented for a new/acute visit were more likely to have an abnormality than those who were at the clinic for a return appointment. **Conclusion.** Screening echocardiography performed by an internist with an HCU device detected clinically significant findings in a clinic that cares for the underserved. Since the natural history of many cardiac disorders can be modified through treatment, the early detection of these diseases in underserved populations may improve patient outcomes.

#### 1096-74

### Cardiovascular Risk Factors as Correlates of Erectile Dysfunction: Results of a Survey in 71,503 Men in Brazil

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**Background:** erectile dysfunction (ED) is now believed to be a vascular problem in its origin. Several studies have demonstrated an association between coronary artery disease (CAD) and ED, however the relationship between hypertension, sedentary lifestyle, smoking and other cardiovascular risk factors with ED remains unclear. Most previous surveys were small and lacked statistical power to investigate these issues. This analysis was conducted to assess these potential associations in a large sample of men in Brazil. **Methods:** a questionnaire was developed and administered in-person by physicians to a sample of consecutive male patients attending a routine office consultation. The survey included 71,503 men aged 18 years or more from 24 states, representing all regions in Brazil. We queried respondents about the presence of erection difficulties, sedentary lifestyle, tobacco use, hypertension, CAD, diabetes, and other medical conditions. The data have been adjusted for age, and known risk factors for ED by logistic regression. **Results:** Overall 31.1% of the men surveyed presented hypertension, 14.1% diabetes, and 7.0% CAD. Smoking was reported by 44% of the subjects and sedentary lifestyle by 34%. Some degree of ED was found in 53.5% of the men (20.8% mild, 26.3% moderate and 6.4% complete). In the multivariate analysis, the odds of ED were significantly increased in men with diabetes (OR=2.4; 95%CI 2.2-2.5), sedentary lifestyle (OR=2.3; 95%CI 2.2-2.4), CAD (OR=1.5; 95%CI 1.3-1.6), hypertension (OR=1.4; 95%CI 1.3-1.5), and smoking (OR=1.1; 95%CI 1.0-1.2). **Conclusions:** our data showed that ED is significantly associated with the presence of several cardiovascular risk factors. These associations remained true even after controlling for potential confounding by multivariate analysis. However, we cannot discern the causal direction of these relationships from cross-sectional data. Indeed, they may simply reflect a common vascular etiology for these conditions. Thus, the presence of cardiovascular risk factors should alert physicians to patients who are at higher risk for ED, and conversely, erectile difficulties should elicit further investigation for hidden cardiovascular diseases.

#### 1096-75

### Bariatric Surgery Is Effective in Controlling Major Risk Factors for Atherosclerosis in Obese Patients With Coronary Artery Disease

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**Background:** The cornerstone of secondary prevention of coronary artery disease (CAD) is adequate control of weight, serum glucose, blood pressure and serum lipids. The efficacy of bariatric surgery on these measures in obese patients with evidence of CAD is unclear and is the focus of this study.

**Methods:** Of the 567 consecutive patients who underwent bariatric surgery, 52 (9%) had CAD based on one or more of the following: history of coronary revascularization (33%, n=17), significant coronary stenosis by angiogram (48%, n=25), inducible ischemia or fixed defects on stress imaging (69%, n=36), and/or history of myocardial infarction (15%, n=8). The efficacy of bariatric surgery was measured by changes in weight and known cardiovascular risk factors. Goals were defined as a loss of >50% of excess weight, fasting glucose <100 mg/dL, glycosylated hemoglobin <7% in patients with diabetes mellitus, systolic blood pressure (SBP) <130 mmHg, diastolic blood pressure

(DBP) <85 mmHg, and LDL cholesterol <100 mg/dL.

**Results:** Patients were 51 ± 9 years old and 58% were men. Sixty-four percent had diabetes mellitus, 89% had hypertension, and 69% had hyperlipidemia. Improvements in cardiovascular risk measurements at follow-up (mean 695 days, range 391-896) are shown below.

**Conclusion:** Bariatric surgery considerably improves the cardiovascular risk profile in obese patients with clinical evidence of CAD and should be considered as a therapeutic option not only for weight loss, but also for risk factor modification.

The effect of bariatric surgery on modifiable cardiovascular risk factors, \*p<0.01, \*\*p<0.05

	Pre-Op	Post-Op	%Goal Pre-op	%Goal Post-op
Weight (kg), n=48	147 ± 36	103 ± 22*	--	63
Body Mass Index (kg/m <sup>2</sup> ), n=48	50 ± 11	36 ± 9*	--	--
Fasting Glucose (mg/dL), n=45	149 ± 52	113 ± 31*	16	38**
Glycosylated Hemoglobin (%), n=30	9 ± 3	6 ± 2*	30	70*
SBP (mm Hg), n=43	142 ± 20	133 ± 17*	28	35
DBP (mm Hg), n=43	82 ± 12	73 ± 11*	67	91**
Total Cholesterol (mg/dL), n=36	198 ± 40	142 ± 37*	--	--
LDL Cholesterol (mg/dL), n=36	116 ± 31	75 ± 26*	33	89*
Triglycerides (mg/dL), n=36	198 ± 85	119 ± 52*	--	--
HDL Cholesterol (mg/dL), n=36	43 ± 10	44 ± 11	--	--

#### 1096-76

### Influence of Serotonin Transporter Gene Polymorphism on Depressive Symptoms and Long-Term Outcome After Acute Myocardial Infarction

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**Background:** Depression after acute myocardial infarction (AMI) is associated with poor long-term outcome. How the serotonin transporter gene-linked polymorphic region (5-HTTLPR) influences either cardiac event or associated with depressive symptoms is unclear. In the 5-HTTLPR polymorphism, the S allele reduces transcription and therefore serotonin reuptake, and is linked with psychiatric disease. **Methods and Results:** To determine whether the S allele is associated with depressive symptoms and poor outcome after AMI, we prospectively examined depressive symptoms and long-term cardiac outcome in 1501 genotyped patients. Depressive symptoms within 3 months after onset of AMI as assessed by the Self-rating Depression Scale were more frequent in patients with than without the S allele (48.6% vs. 30.0%, P=0.01). Cardiac events (cardiac death, need for revascularization, heart failure, reinfarction, arrhythmia, or unstable angina) were more frequent with than without the S allele (24.3% vs. 12.7%, P=0.02). After adjustment for other variables, the S allele was independently associated with depressive symptoms (odds ratio, 2.37; 95% CI, 1.18 to 4.77, P=0.02), but not with increased risk of poor long-term outcome (hazard ratio, 1.62; 95% CI, 0.80 to 3.26; P=0.18). **Conclusions:** The S allele of the 5-HTTLPR predicts depressive symptoms and a worse cardiac outcome. Assessment of 5-HTTLPR genetic variants may be a way to predict risk and outcome in AMI.

## POSTER SESSION

### 1115 Outcomes of Cardiovascular Care

Monday, March 08, 2004, 3:00 p.m.-5:00 p.m.

Morial Convention Center, Hall G

Presentation Hour: 4:00 p.m.-5:00 p.m.

#### 1115-67

### The Medicine, Angioplasty, or Surgery Study (MASS II): Quality of Life of Patients With Symptomatic Multivessel Coronary Disease-24 Months of Follow-Up

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**Background:** although coronary angioplasty (PTCA) and coronary bypass surgery (CABG) are routinely used, there is no conclusive evidence that these interventional methods offer greater benefit than medical therapy (MT) alone as far as quality of life (QOL).

**Objective:** This study sought to evaluate the QOL of three possible therapeutic strategies for patients with symptomatic multivessel coronary disease and preserved ventricular function.

**Methods:** a total of 7783 eligible patients with multivessel disease were screened in a single institution and 611 7.8% patients were randomly assigned to undergo CABG, 203 to PTCA 205 and 203 to MT. QOL was evaluated by SF-36 questionnaire by interviews, in the pre treatment phase at 12 and 24 months of follow up.

**Results:** although all treatments offered improvement in QOL, such amelioration was greater in surgical group (table). \*p<.0001

**Conclusion:** In conclusion surgical treatment offers better QOL among patients with extensive CAD than PCTA or MT.